

Feb. 21, 1928.

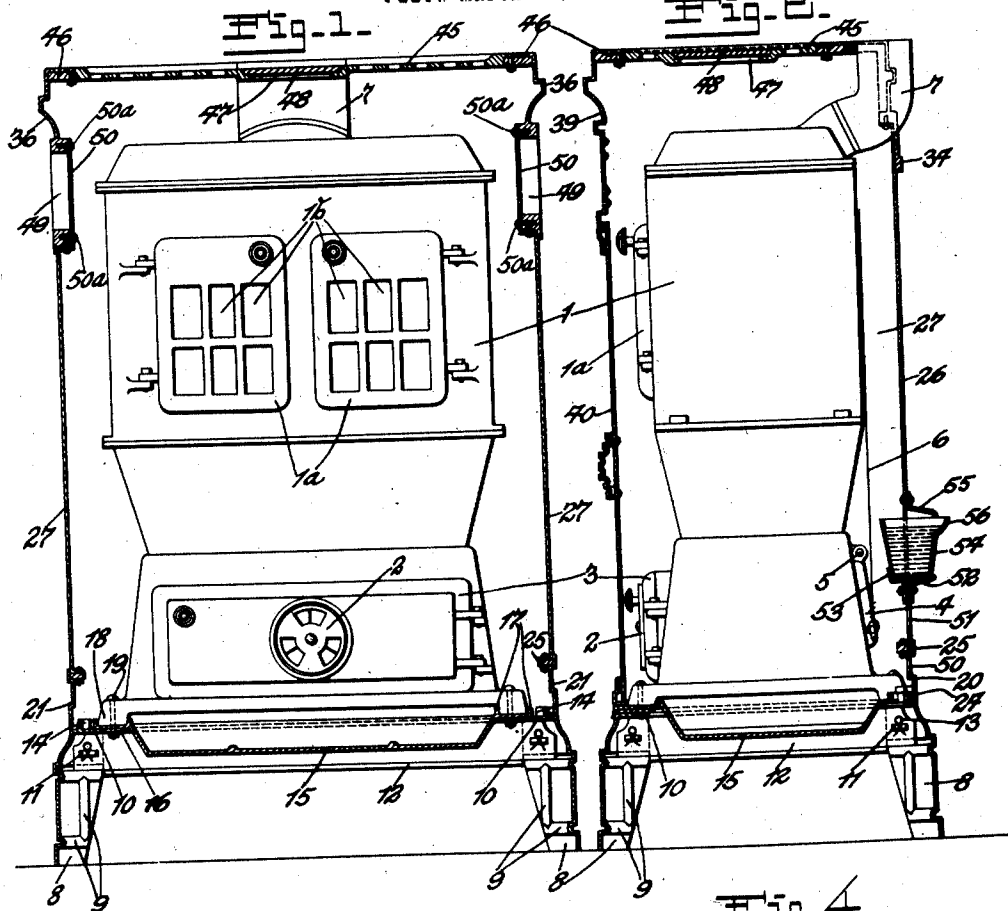
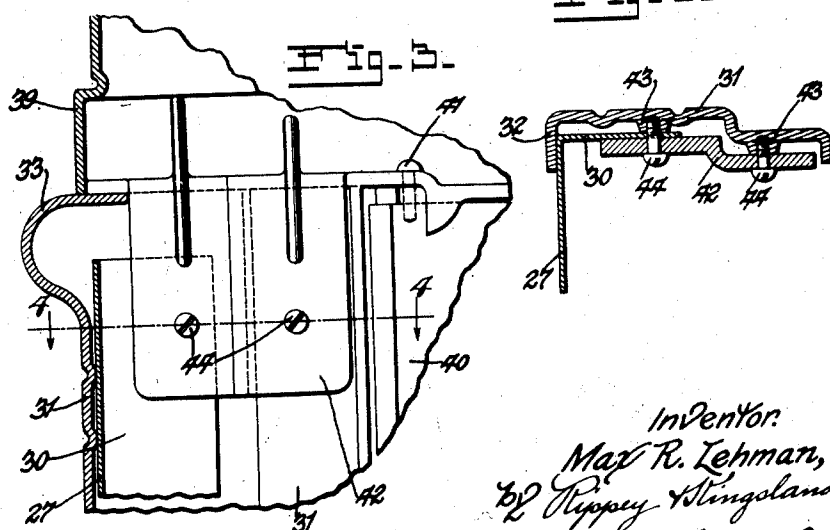
1,659,694

M. R. LEHMAN

HEATER

Filed March 30, 1927

2 Sheets-Sheet 1



Inventor:
Max R. Lehman,
by Ruppey Klingensland.
His Attorneys.

Feb. 21, 1928.

1,659,694

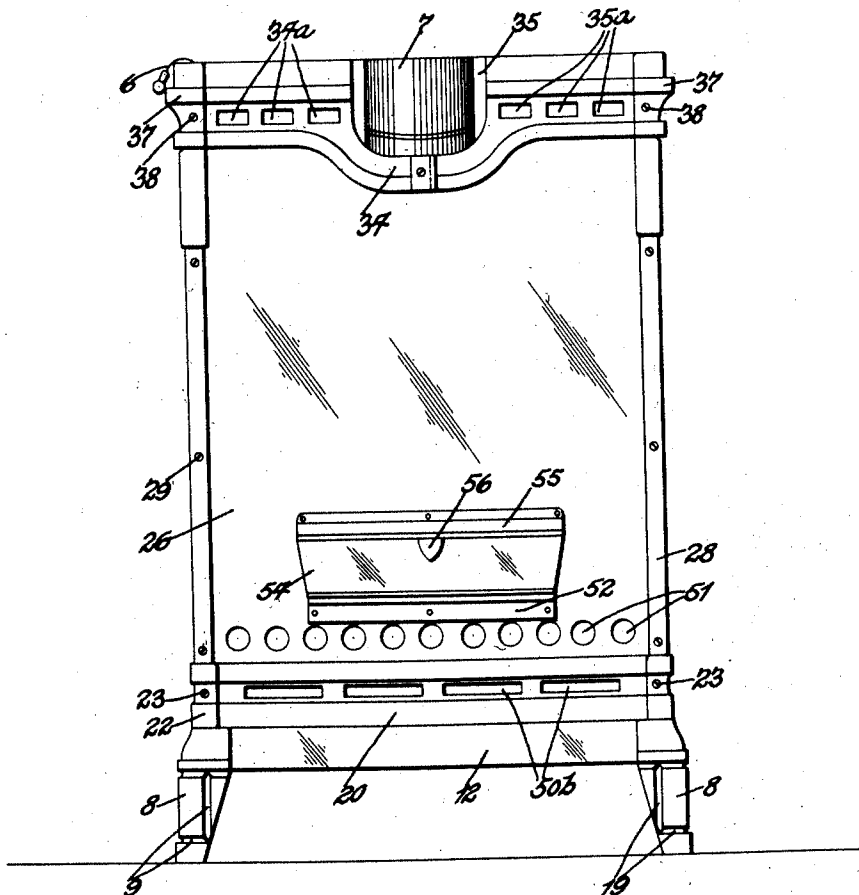
M. R. LEHMAN

HEATER

Filed March 30, 1927

2 Sheets-Sheet 2

Fig-5-



Inventor:
Max R. Lehman,
by Phipps & Klingeland.
His Attorneys.

Patented Feb. 21, 1928.

1,659,694

UNITED STATES PATENT OFFICE.

MAX R. LEHMAN, OF QUINCY, ILLINOIS, ASSIGNOR TO ORBON STOVE CO., OF BELLEVILLE, ILLINOIS, A CORPORATION OF ILLINOIS.

HEATER.

Application filed March 30, 1927. Serial No. 179,412.

This invention relates to heaters, and has for an object to provide a heater of improved and ornamental appearance and comprising a construction whereby all of the advantages of utility and ornamentation apparent from the following description are obtained.

Another object of the invention is to provide an improved heater comprising an outer enclosing casing of highly ornamental design and appearance obtained as a result of novel utility features of construction, in combination with an enclosed combustion device having improved draft facilities and supported in rigid relationship within the outer enclosing casing.

Another object of the invention is to provide an improved heater comprising a heat generating combustion device or stove, in combination with an improved enclosing and supporting casing therefor composed of detachable units held in rigid relationship and provided with doors which may be closed entirely or opened to any desired extent.

Another object is to provide an improved heater embodying the general construction herein disclosed, or the equivalent, and possessing all of the advantages of ornamental appearance and useful functions made apparent from the following description, reference being made to the drawings, in which, Fig. 1 is a vertical cross sectional view of my improved heater casing, the combustion device or stove being shown in elevation.

Fig. 2 is a vertical sectional view from front to rear of the casing.

Fig. 3 is an enlarged detail vertical sectional view showing the inside corner construction whereby the casing sections are rigidly united.

Fig. 4 is a horizontal sectional view on the line 4-4 of Fig. 3.

Fig. 5 is a rear elevation of the heater.

The combustion and heat generating device or stove 1 of my improved heater is of conventional construction, except that, in addition to the front draft controlling device 2 which is mounted on a door 3 controlling access to the ash compartment, there is also provided a rear draft door 4, (Fig. 2). This draft door 4 has its upper end or edge mounted on a horizontal hinge device 5 and its lower edge connected to a control element 6. The door 4 will be closed by gravity and may be opened by the device

6, preferably in the form of a wire or chain extended upwardly through the casing top (Fig. 5). The upper end of the combustion device has an outlet 7 for connection with a stove pipe leading to a flue. This outlet 7 extends rearwardly and upwardly and has appropriate relationship to the enclosing casing, as hereinafter mentioned, and as is apparent in Figs. 2 and 5. The front of the stove 1 is provided with one or more paneled fuel admission doors 1^a. The panels 1^b of these doors are translucent.

The enclosing casing is sectional in construction. In the embodiment shown, it is mounted on four exteriorly enameled corner supporting legs 8, which are angular in cross section, and formed with grooves 9 to give the appearance that the legs are composed of tile, although this feature may be varied without departure from the invention. These ornamentally designed legs have inwardly extended top portions 10, and below the top portions have inwardly extended lugs 11 for supporting the members of the base frame of the heater casing. The base frame of the heater casing comprises four exteriorly enameled frame members 12 having holes near their ends receiving the lugs 10, so that the ends of these base frame members are within the angles of the legs 8. These frame members are designed to resemble tile and may be secured upon the lugs 11 by cotter pins 13, or other retaining devices, which pass through holes in the lugs 11 and retain the frame members 12 thereon, thus avoiding the use of visible fasteners. From the upper end 10 of each of the legs, an angular projection 14 rises, the same forming retainers for the lower end of the casing proper. The bottom of the enclosing casing is in the form of a pan 15 having outward corner extensions 16 seated upon the upper ends 10 of the legs between the series of projections 14. These extensions 16 have upwardly extended flanges 17 forming recesses for depending portions 18 of the base of the stove, thus facilitating the placing of the combustion device in proper assembly and cooperating in holding the same in proper position. Bolts 19 pass through the parts 18 and the flange 16, and secure these parts together, but permit their separation.

The lower portion of the casing proper comprises a rear member 20 and two side

members 21 having inwardly extended rear ends 22, to which the ends of the member 20 are secured by fasteners 23. The lower edges of the members 20 and 21 are extended inwardly, forming flanges 24 seated upon the upper ends of the legs 8 and extending along the upper edges of the base frame members 12. Preferably, the frame members 21 are formed, designed and enameled to resemble tile, as are the legs 8 and the side and front frame members 12, thus obtaining a pleasing appearance. The upper edges of the casing members 20 and 21 have inward extensions 25 upon which inwardly extended lower edges of the rear casing wall 26 and the side casing walls 27 are secured (Figs. 1 and 2). The rear edges 28 of the side casing walls 27 extend inwardly against the outer side of the vertical edges of the rear wall 26 and these parts are secured together by fasteners 29 (Fig. 5). The front edges of the side walls 27 have portions 30 extending toward each other (Figs. 3 and 4).

The front door frame of the casing comprises a pair of vertical members 31 mounted in front of the inward extensions 30, and having rearward extensions 32 to overlap the front corners of the side walls 27 of the casing. These members 31 are preferably designed and shaped in imitation of tiling, so as to carry out the ornamental design in connection with the mechanical structure, and without detracting from the utility of the device. The members 31 extend upwardly from the base frame and have their upper ends shaped to carry out the ornamental effect and to provide a support 33 for the upper part of the casing.

The upper part of the casing comprises a rear member 34 having a gap 35 (Fig. 5) for the outlet 7. There are two side members 36 having inward extensions 37 at their rear ends, which are secured to the rear member 34 by fasteners 38.

The front member 39 extends from side to side of the casing above the door frame members 31. Thus, a door frame is formed by the front base frame member 12, the vertical front corner members 31 and the transverse front member 39, and in this frame a pair of doors 40 are hinged on vertical pivots 41 near their outer edges. One of the doors is shown in section in Fig. 2 and a hinge 41 therefor in Fig. 3.

The transverse front frame member 39 at each side of the door frame has a depending portion 42 which laps the upright door frame members 31 and the inward extensions 30 of the side walls 27. The upright members 31 have lugs 43 (Fig. 4) provided with threaded holes, one of which lugs bears against each of the parts 30 of the side walls and the other of which lugs bears against the adjacent portion of the part 42. Screws

pass through the part 42 and engage in the threaded holes which do not extend entirely through the part 31, one of said screws passing through each side wall extension 30. The parts of the casing are thus held in rigid relationship without any visible securing devices such as stove bolts at the front and sides, thus maintaining the ornamental appearance of the device throughout.

The top of the casing comprises a grid 45 secured to inside flanges 46 of the members 34, 36 and 39. As shown, this grid may be formed with a large hole 47 provided with a removable lid 48. The lid 48 may be kept in position, or removed to permit placing of a cooking or other utensil. The element 6' for opening the rear draft door 4 extends through the grid 45 (Fig. 5) and is engageable therewith to hold the door 4 in its adjusted positions.

The side members 36 are formed with openings 49 (Fig. 1) covered by perforated enameled plates 50, preferably having the appearance of woven cane splints and this woven enameled effect may also be given to the panels of the doors 40. These plates 50 are attached to the inside of the casing by fasteners 50^a which are invisible from the outside.

The rear member 20 of the casing has a number of air inlet holes 50^b and the lower end of the rear wall 26 of the casing has a transverse series of air inlet holes 51 (Fig. 5). The top rear member 34 has a series of air holes 34^a. Above the holes 51 an opening is formed in the rear wall 26 and an angular strip of metal 52 is attached to the wall 26 below said opening and above the holes 51. The edge of the wall 26 below said opening is extended inwardly and upwardly to provide a support and abutment 53. A removable water receptacle 54 may be maintained in this opening, the same being supported by the part 52 and the supporting abutment 53 and this water receptacle is covered and shielded on the outside by a visor 55 (Figs. 2 and 5). At a convenient point along the rear wall of the receptacle 55, an inlet opening 56 is provided to admit water into the receptacle without removing the receptacle from its mounting.

From the foregoing it will be seen that I have provided a very efficient heater having a highly ornamental and pleasing effect, many of the features of which result from elements of utility. Air is admitted to the casing confining the stove at proper places and becomes heated and humidified in the casing, rising therein and passing out through the perforated doors 40, the panels 50 and the top grid. The transparent panels 1^b are visible through the perforated panels of the front doors 40, giving a luminous effect which may be increased, if desirable, by opening or partially opening one or both

of the doors 40. The device is designed so that it may be manufactured to obtain the ornamental and artistic effects and, at the same time, increase the efficiency without increase in cost. The structure and relationship of the parts may be varied without departure from the nature and principle of the invention, as defined by the appended claims.

10 What I claim and desire to secure by Letters Patent is:—

1. A heater comprising four corner supporting legs, four frame members having their ends attached to the inner sides of said legs respectively, an inwardly extended top portion integral with the upper end of each of said legs, an angular projection rising integrally from each of said top portions, a pan, corner extensions on said pan seated on said extensions of said legs between said projections, flanges on said extensions of said pan, a stove base seated on said extensions and engaging said flanges, fasteners passing through said stove base and through said extensions, and a casing mounted on said legs and engaging the outer sides of said projections and being held in position thereby.

2. A heater comprising four corner supporting legs, four frame members having their ends attached to the inner sides of said legs respectively, an angular projection rising integrally from the upper end of each of said legs, a pan, corner extensions on said pan supported by said legs and engaging said projections, flanges forming recesses on said extensions of said pan, a stove box seated in said recesses and held from lateral displacement by said flanges, and a casing mounted on said legs and engaging the outer

sides of said projections and being held in position thereby. 40

3. A heater comprising four corner supporting legs, a frame holding said legs upright, an angular projection rising integrally from the upper end of each of said legs, a stove, a pan mounted on the upper ends of said legs between said projections and supporting said stove, means holding said stove from displacement on said pan, and a casing supported by said legs and enclosing said stove. 50

4. A heater comprising four corner supporting legs, a frame holding said legs upright, an angular projection rising integrally from the upper end of each of said legs, a stove, a pan mounted on the upper ends of said legs between said projections and supporting said stove, means holding said stove from displacement on said pan, a casing supported by said legs and enclosing said stove, and provided with a series of air inlets near its lower ends, and a water receptacle supported in one wall of said casing partly within and partly without the casing. 60

5. A heater comprising four corner supporting legs, a frame supported by and maintaining said legs in upright positions, projections from the upper ends of said legs, a stove support removably mounted on the upper ends of said legs and held from lateral displacement by said projections, a stove mounted on said support, elements holding said stove from displacement on said support, and a casing enclosing said stove and mounted on the upper ends of said legs and engaging the outer sides of said projections. 75

MAX R. LEHMAN.